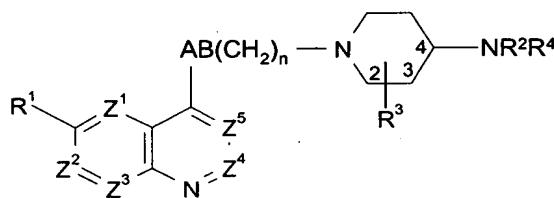


**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1 (Currently Amended). A compound of formula (I) or a pharmaceutically acceptable salt, ~~ester and/or N-oxide derivative~~ thereof:



wherein:

one of Z¹, Z², and Z³, Z⁴ and Z⁵ is N, and Z⁴, Z⁵ and remainder of Z¹, Z², and Z³ not equal to N are CR¹a;

R¹ and R¹a are independently hydrogen; hydroxy; (C<sub>1-6</sub>)alkoxy optionally substituted by (C<sub>1-6</sub>)alkoxy, amino, piperidyl, guanidino or amidino optionally N-substituted by one or two (C<sub>1-6</sub>)alkyl, acyl or (C<sub>1-6</sub>)alkylsulphonyl groups, CONH<sub>2</sub>, hydroxy, thiol, (C<sub>1-6</sub>)alkylthio, heterocyclithio, heterocyclyloxy, arylthio, aryloxy, acylthio, acyloxy or (C<sub>1-6</sub>)alkylsulphonyloxy; (C<sub>1-6</sub>)alkoxy-substituted(C<sub>1-6</sub>)alkyl; halogen; (C<sub>1-6</sub>)alkyl; (C<sub>1-6</sub>)alkylthio; nitro; azido; acyl; acyloxy; (C<sub>1-6</sub>)alkylsulphonyl; (C<sub>1-6</sub>)alkylsulphoxide; arylsulphonyl; arylsulphoxide or an amino, piperidyl, guanidino or amidino group optionally N-substituted by one or two (C<sub>1-6</sub>)alkyl, acyl or (C<sub>1-6</sub>)alkylsulphonyl groups; and

additionally when Z⁵ is CR¹a, R¹a may be (C<sub>1-4</sub>)alkyl-CO<sub>2</sub>H or (C<sub>1-4</sub>)alkyl-CONH<sub>2</sub> in which the C<sub>1-4</sub> alkyl is substituted by R¹²; (C<sub>1-4</sub>)alkyl substituted by cyano, amino or guanidino; aminocarbonyl optionally substituted by hydroxy, (C<sub>1-6</sub>)alkyl, hydroxy(C<sub>1-6</sub>)alkyl, aminocarbonyl(C<sub>1-6</sub>)alkyl, (C<sub>2-6</sub>)alkenyl, (C<sub>1-6</sub>)alkylsulphonyl, trifluoromethylsulphonyl, (C<sub>1-6</sub>)alkenylsulphonyl, (C<sub>1-6</sub>)alkoxycarbonyl, (C<sub>1-6</sub>)alkylcarbonyl, (C<sub>2-6</sub>)alkenyloxycarbonyl, (C<sub>2-6</sub>)alkenylcarbonyl, or CH(R¹³)CO<sub>2</sub>H or CH(R¹³)CONH<sub>2</sub> optionally further substituted N-substituted by (C<sub>1-6</sub>)alkyl, hydroxy(C<sub>1-6</sub>)alkyl, aminocarbonyl(C<sub>1-6</sub>)alkyl or (C<sub>2-6</sub>)alkenyl, hydroxy(C<sub>1-6</sub>)alkyl; carboxy; cyano or (C<sub>1-6</sub>)alkoxycarbonyl;

wherein R¹³ is a natural α-amino acid side chain or its enantiomer;

R<sup>2</sup> is hydrogen, or (C<sub>1-4</sub>)alkyl or (C<sub>1-4</sub>)alkenyl optionally substituted with 1 to 3 groups selected from:

amino optionally substituted by one or two (C<sub>1-4</sub>)alkyl groups; carboxy; (C<sub>1-4</sub>)alkoxycarbonyl; (C<sub>1-4</sub>)alkylcarbonyl; (C<sub>2-4</sub>)alkenyloxycarbonyl; (C<sub>2-4</sub>)alkenylcarbonyl; aminocarbonyl, wherein the amino group is optionally substituted by hydroxy, (C<sub>1-4</sub>)alkyl, hydroxy(C<sub>1-4</sub>)alkyl, aminocarbonyl(C<sub>1-4</sub>)alkyl, (C<sub>2-4</sub>)alkenyl, (C<sub>1-4</sub>)alkylsulphonyl, trifluoromethylsulphonyl, (C<sub>1-4</sub>)alkenylsulphonyl, (C<sub>1-4</sub>)alkoxycarbonyl, (C<sub>1-4</sub>)alkylcarbonyl, (C<sub>2-4</sub>)alkenyloxycarbonyl or (C<sub>2-4</sub>)alkenylcarbonyl; cyano; tetrazolyl; 2-oxo-oxazolidinyl optionally substituted by R<sup>10</sup>; 3-hydroxy-3-cyclobutene-1,2-dione-4-yl; 2,4-thiazolidinedione-5-yl; tetrazol-5-ylaminocarbonyl; 1,2,4-triazol-5-yl optionally substituted by R<sup>10</sup>; 5-oxo-1,2,4-oxadiazol-3-yl; thiol; halogen; (C<sub>1-4</sub>)alkylthio; trifluoromethyl; azido; hydroxy optionally substituted by (C<sub>1-4</sub>)alkyl, (C<sub>2-4</sub>)alkenyl, (C<sub>1-4</sub>)alkoxycarbonyl, (C<sub>1-4</sub>)alkylcarbonyl, (C<sub>2-4</sub>)alkenyloxycarbonyl, (C<sub>2-4</sub>)alkenylcarbonyl; oxo; (C<sub>1-4</sub>)alkylsulphonyl; (C<sub>2-4</sub>)alkenylsulphonyl; or (C<sub>1-4</sub>)aminosulphonyl, wherein the amino group is optionally substituted by (C<sub>1-4</sub>)alkyl or (C<sub>2-4</sub>)alkenyl;

R<sup>3</sup> is hydrogen; or

R<sup>3</sup> is in the 2-, 3- or 4-position and is:

carboxy; (C<sub>1-6</sub>)alkoxycarbonyl; aminocarbonyl, wherein the amino group is optionally substituted by hydroxy, (C<sub>1-6</sub>)alkyl, hydroxy(C<sub>1-6</sub>)alkyl, aminocarbonyl(C<sub>1-6</sub>)alkyl, (C<sub>2-6</sub>)alkenyl, (C<sub>1-6</sub>)alkylsulphonyl, trifluoromethylsulphonyl, (C<sub>1-6</sub>)alkenylsulphonyl, (C<sub>1-6</sub>)alkoxycarbonyl, (C<sub>1-6</sub>)alkylcarbonyl, (C<sub>2-6</sub>)alkenyloxycarbonyl or (C<sub>2-6</sub>)alkenylcarbonyl and optionally further substituted by (C<sub>1-6</sub>)alkyl, hydroxy(C<sub>1-6</sub>)alkyl, aminocarbonyl(C<sub>1-6</sub>)alkyl or (C<sub>2-6</sub>)alkenyl; cyano; tetrazolyl; 2-oxo-oxazolidinyl optionally substituted by R<sup>10</sup>; 3-hydroxy-3-cyclobutene-1,2-dione-4-yl; 2,4-thiazolidinedione-5-yl; tetrazol-5-ylaminocarbonyl; 1,2,4-triazol-5-yl optionally substituted by R<sup>10</sup>; or 5-oxo-1,2,4-oxadiazol-3-yl; or

(C<sub>1-4</sub>)alkyl optionally substituted or ethenyl substituted with any of the substituents listed above for R<sup>3</sup> and up to 3 groups for R<sup>12</sup> independently selected from:

thiol; halogen; (C<sub>1-6</sub>)alkylthio; trifluoromethyl; azido; (C<sub>1-6</sub>)alkoxycarbonyl; (C<sub>1-6</sub>)alkylcarbonyl; (C<sub>2-6</sub>)alkenyloxycarbonyl; (C<sub>2-6</sub>)alkenylcarbonyl; hydroxy optionally substituted by (C<sub>1-6</sub>)alkyl, (C<sub>2-6</sub>)alkenyl, (C<sub>1-6</sub>)alkoxycarbonyl, (C<sub>1-6</sub>)alkylcarbonyl, (C<sub>2-6</sub>)alkenyloxycarbonyl, (C<sub>2-6</sub>)alkenylcarbonyl or aminocarbonyl, wherein the amino group is optionally substituted by (C<sub>1-6</sub>)alkyl, (C<sub>2-6</sub>)alkenyl, (C<sub>1-6</sub>)alkylcarbonyl or (C<sub>2-6</sub>)alkenylcarbonyl; amino optionally mono- or disubstituted by (C<sub>1-6</sub>)alkoxycarbonyl, (C<sub>1-6</sub>)alkylcarbonyl, (C<sub>2-6</sub>)alkenyloxycarbonyl, (C<sub>2-6</sub>)alkenylcarbonyl, (C<sub>1-6</sub>)alkyl, (C<sub>2-6</sub>)alkenyl, (C<sub>1-6</sub>)alkylsulphonyl, (C<sub>2-6</sub>)alkenylsulphonyl or aminocarbonyl, wherein the amino group is optionally substituted by (C<sub>1-6</sub>)alkyl or (C<sub>2-6</sub>)alkenyl; aminocarbonyl,

wherein the amino group is optionally substituted by (C<sub>1-6</sub>)alkyl, hydroxy(C<sub>1-6</sub>)alkyl, aminocarbonyl(C<sub>1-6</sub>)alkyl, (C<sub>2-6</sub>)alkenyl, (C<sub>1-6</sub>)alkoxycarbonyl, (C<sub>1-6</sub>)alkylcarbonyl, (C<sub>2-6</sub>)alkenyloxycarbonyl or (C<sub>2-6</sub>)alkenylcarbonyl and optionally further substituted by (C<sub>1-6</sub>)alkyl, hydroxy(C<sub>1-6</sub>)alkyl, aminocarbonyl(C<sub>1-6</sub>)alkyl or (C<sub>2-6</sub>)alkenyl; oxo; (C<sub>1-6</sub>)alkylsulphonyl; (C<sub>2-6</sub>)alkenylsulphonyl; or (C<sub>1-6</sub>)aminosulphonyl, wherein the amino group is optionally substituted by (C<sub>1-6</sub>)alkyl or (C<sub>2-6</sub>)alkenyl; in addition when R<sup>3</sup> is disubstituted with a hydroxy or amino containing substituent and carboxy containing substituent these may together form a cyclic ester or amide linkage, respectively; or

when R<sup>3</sup> is in the 3- or 4-position it may with R<sup>2</sup> or R<sup>4</sup> form a C<sub>3-5</sub> alkylene group optionally substituted by a group R<sup>5</sup> selected from:

(C<sub>1-12</sub>)alkyl; hydroxy(C<sub>1-12</sub>)alkyl; (C<sub>1-12</sub>)alkoxy(C<sub>1-12</sub>)alkyl; (C<sub>1-12</sub>)alkanoyloxy(C<sub>1-12</sub>)alkyl; (C<sub>3-6</sub>)cycloalkyl; hydroxy(C<sub>3-6</sub>)cycloalkyl; (C<sub>1-12</sub>)alkoxy(C<sub>3-6</sub>)cycloalkyl; (C<sub>1-12</sub>)alkanoyloxy(C<sub>3-6</sub>)cycloalkyl; (C<sub>3-6</sub>)cycloalkyl(C<sub>1-12</sub>)alkyl; hydroxy-, (C<sub>1-12</sub>)alkoxy- or (C<sub>1-12</sub>)alkanoyloxy-(C<sub>3-6</sub>)cycloalkyl(C<sub>1-12</sub>)alkyl; cyano; cyano(C<sub>1-12</sub>)alkyl; (C<sub>2-12</sub>)alkenyl; (C<sub>2-12</sub>)alkynyl; tetrahydrofuryl; mono- or di-(C<sub>1-12</sub>)alkylamino(C<sub>1-12</sub>)alkyl; acylamino(C<sub>1-12</sub>)alkyl; (C<sub>1-12</sub>)alkyl- or acyl-aminocarbonyl(C<sub>1-12</sub>)alkyl; mono- or di-(C<sub>1-12</sub>)alkylamino(hydroxy) (C<sub>1-12</sub>)alkyl; optionally substituted phenyl(C<sub>1-12</sub>)alkyl, phenoxy(C<sub>1-12</sub>)alkyl or phenyl(hydroxy)(C<sub>1-12</sub>)alkyl; optionally substituted diphenyl(C<sub>1-12</sub>)alkyl; optionally substituted phenyl(C<sub>2-12</sub>)alkenyl; optionally substituted benzoyl or benzoyl(C<sub>1-12</sub>)alkyl; optionally substituted heteroaryl or heteroaryl(C<sub>1-12</sub>)alkyl; and optionally substituted heteroaroyl or heteroaroyl(C<sub>1-12</sub>)alkyl;

wherein phenyl, benzoyl, heteroaryl and heteroaroyl groups are optionally substituted with up to five groups selected from halogen, mercapto, (C<sub>1-6</sub>)alkyl, phenyl, (C<sub>1-6</sub>)alkoxy, hydroxy(C<sub>1-6</sub>)alkyl, mercapto (C<sub>1-6</sub>)alkyl, halo(C<sub>1-6</sub>)alkyl, hydroxy, optionally substituted amino, nitro, carboxy, (C<sub>1-6</sub>)alkylcarbonyloxy, (C<sub>1-6</sub>)alkoxycarbonyl, formyl, and (C<sub>1-6</sub>)alkylcarbonyl groups;

R<sup>4</sup> forms a group with R<sup>3</sup> as above defined, or is a group -CH<sub>2</sub>-R<sup>5</sup> where R<sup>5</sup> is as defined above:

n is 0, 1 or 2;

A is NR<sup>11</sup> or CR<sup>6</sup>R<sup>7</sup> and B is NR<sup>11</sup>, O, SO<sub>2</sub> or CR<sup>8</sup>R<sup>9</sup>; and

wherein:

each of R<sup>6</sup>, R<sup>7</sup>, R<sup>8</sup> and R<sup>9</sup> is independently selected from: hydrogen; (C<sub>1-6</sub>)alkylthio; halo; trifluoromethyl; azido; (C<sub>1-6</sub>)alkyl; (C<sub>2-6</sub>)alkenyl; (C<sub>1-6</sub>)alkoxycarbonyl; (C<sub>1-6</sub>)alkylcarbonyl;

(C<sub>2-6</sub>)alkenyloxycarbonyl; (C<sub>2-6</sub>)alkenylcarbonyl; hydroxy, amino or aminocarbonyl optionally substituted as for corresponding substituents R<sup>12</sup> as defined in R<sup>3</sup>; (C<sub>1-6</sub>)alkylsulphonyl; (C<sub>2-6</sub>)alkenylsulphonyl; or (C<sub>1-6</sub>)aminosulphonyl, wherein the amino group is optionally substituted by (C<sub>1-6</sub>)alkyl or (C<sub>1-6</sub>)alkenyl; or R<sup>6</sup> and R<sup>8</sup> together represent a bond and R<sup>7</sup> and R<sup>9</sup> are as above defined; or R<sup>6</sup> and R<sup>7</sup> or R<sup>8</sup> and R<sup>9</sup> together represent oxo; provided that:

when A is NR<sup>11</sup>, B is not NR<sup>11</sup>, O or SO<sub>2</sub>;

when A is CO, B is not CO, O or SO<sub>2</sub>;

when n is 0 and A is NR<sup>11</sup>, CR<sup>8</sup>R<sup>9</sup> can only be CO;

when A is CR<sup>6</sup>R<sup>7</sup> and B is SO<sub>2</sub>, n is 0;

when n is 0, B is not NR<sup>11</sup> or O; and

when A-B is CR<sup>7</sup>=CR<sup>9</sup>, n is 1 or 2;

R<sup>10</sup> is selected from (C<sub>1-4</sub>)alkyl; (C<sub>2-4</sub>)alkenyl and aryl, each of which is optionally substituted by a group R<sup>12</sup> as defined above; carboxy; aminocarbonyl, wherein the amino group is optionally substituted by hydroxy, (C<sub>1-6</sub>)alkyl, (C<sub>2-6</sub>)alkenyl, (C<sub>1-6</sub>)alkylsulphonyl, trifluoromethylsulphonyl, (C<sub>1-6</sub>)alkenylsulphonyl, (C<sub>1-6</sub>)alkoxycarbonyl, (C<sub>1-6</sub>)alkylcarbonyl, (C<sub>2-6</sub>)alkenyloxycarbonyl or (C<sub>2-6</sub>)alkenylcarbonyl and optionally further substituted by (C<sub>1-6</sub>)alkyl or (C<sub>2-6</sub>)alkenyl; (C<sub>1-6</sub>)alkylsulphonyl; trifluoromethylsulphonyl; (C<sub>1-6</sub>)alkenylsulphonyl; (C<sub>1-6</sub>)alkoxycarbonyl; (C<sub>1-6</sub>)alkylcarbonyl; (C<sub>2-6</sub>)alkenyloxycarbonyl; and (C<sub>2-6</sub>)alkenylcarbonyl;

R<sup>11</sup> is hydrogen; trifluoromethyl, (C<sub>1-6</sub>)alkyl; (C<sub>1-6</sub>)alkenyl; (C<sub>1-6</sub>)alkoxycarbonyl; (C<sub>1-6</sub>)alkylcarbonyl; aminocarbonyl, wherein the amino group is optionally substituted by (C<sub>1-6</sub>)alkoxycarbonyl, (C<sub>1-6</sub>)alkylcarbonyl, (C<sub>1-6</sub>)alkenyloxycarbonyl, (C<sub>2-6</sub>)alkenylcarbonyl, (C<sub>1-6</sub>)alkyl or (C<sub>1-6</sub>)alkenyl and optionally further substituted by (C<sub>1-6</sub>)alkyl or (C<sub>1-6</sub>)alkenyl.

2 (Original). A compound according to claim 1 wherein:

- (a) Z<sup>1</sup> is N, and Z<sup>2-Z<sup>5</sup></sup> are CH,
- (b) Z<sup>1-Z<sup>5</sup></sup> are each CH, or
- (c) Z<sup>5</sup> is N, and Z<sup>1-Z<sup>4</sup></sup> are CH.

Claims 3-10. (Cancelled)

11 (Original). A compound according to claim 1 wherein R<sup>1</sup> and R<sup>1a</sup> are independently methoxy, amino(C<sub>3-5</sub>)alkyloxy, guanidino(C<sub>3-5</sub>)alkyloxy, piperidyl(C<sub>3-5</sub>)alkyloxy, nitro or fluoro.

12 (Currently Amended). A compound according to claim 1 wherein R<sup>3</sup> is hydrogen; optionally substituted aminocarbonyl; optionally substituted (C<sub>1-4</sub>)alkyl; carboxy(C<sub>1-4</sub>)alkyl; optionally substituted aminocarbonyl(C<sub>1-4</sub>)alkyl; cyano(C<sub>1-4</sub>)alkyl; optionally substituted 2-oxo-oxazolidinyl or optionally substituted 2-oxo-oxazolidinyl(C<sub>1-4</sub>alkyl).

13 (Original). A compound according to claim 1 wherein R<sup>3</sup> is in the 3-position and the substituents at the 3- and 4-position of the piperidine ring are *cis*.

14 (Original). A compound according to claim 1 wherein A is NH and B is CO, or A is CHOH and B is CH<sub>2</sub>.

15 (Original). A compound according to claim 1 wherein R<sup>11</sup> is hydrogen.

16 (Original). A compound according to claim 1 wherein R<sup>4</sup> is (C<sub>5-12</sub>)alkyl, optionally substituted phenyl(C<sub>2-3</sub>)alkyl or optionally substituted phenyl(C<sub>3-4</sub>)alkenyl.

17 (Currently Amended). A pharmaceutical composition comprising a compound of formula (I) as defined in claim 1, or a pharmaceutically acceptable salt, ~~ester and/or N-oxide derivative~~ thereof, and a pharmaceutically acceptable carrier.

18 (Currently Amended). A method of treating bacterial infections in mammals caused by *S.aureus* and *S.pneumoniae* organisms, which comprises administering to a mammal in need thereof an effective amount of a compound of formula (I) as defined in claim 1, or a pharmaceutically acceptable salt, ~~ester and/or N-oxide derivative~~ thereof.

19 (New). The compound according to claim 1, wherein the compound is:  
4-Heptylamino-1-(6-methoxy-[1,5]-naphthyridin-4-yl)aminocarbonylpiperidine ;  
4-Heptylamino-4-methoxycarbonyl-1-(6-methoxy-[1,5]-naphthyridine-4-yl)aminocarbonylpiperidine ;or  
4-Heptylamino-4-hydroxymethyl-1-(6-methoxy-[1,5]-naphthyridine-4-yl)aminocarbonylpiperidine .